

UPC-2

Log # 10-02 (for office use only)

**WASHINGTON STATE BUILDING CODE COUNCIL  
APPLICATION FOR REVIEW OF A PROPOSED STATEWIDE AMENDMENT  
TO THE WASHINGTON STATE BUILDING CODE**

**1. State Building Code to be Amended.**

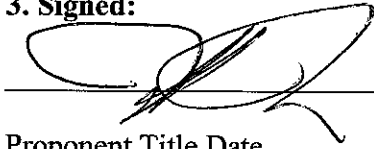
- ☐ International Building Code ☐ Ventilation and Indoor Air Quality Code  
☐ International Residential Code ☐ International Mechanical Code  
☐ ICC ANSI A117.1 Accessibility Code ☐ International Fuel Gas Code  
☐ International Fire Code ☐ NFPA 54 National Fuel Gas Code  
☒ Uniform Plumbing Code ☐ NFPA 58 Liquefied Petroleum Gas Code  
☐ State Energy Code

**Section 508.2 Page 44**

**2. Applicant:**

Fast Water Heater Company

**3. Signed:**



President 5/21/2009

Proponent Title Date

**4. Contact Person:**

Jeff Jordan

Name Title

Address: 12601 132 Ave NE

Kirkland, WA 98034

Phone: (425) 636-7058 Fax: (425) 636-7058

**RECEIVED**  
MAY 27 2009  
SBCC

**7. Proposed Code Amendment** (Underline all added words, strike through deleted words)

Additional pages may be attached.

Code UPC Section 508.2 Page 44

Amend section to read as follows:

In seismic design categories C, D, E, and F, water heaters shall be anchored or strapped to resist horizontal displacement due to earthquake motion. Strapping shall be at points within the upper one-third (1/3) and lower one-third (1/3) of its vertical dimensions. At the lower point, a minimum distance of four (4) inches (102 mm) shall be maintained above the controls with the strapping.

Exceptions:

1. The lower strap may be located above the lower one third (1/3) if necessary to maintain 4" of clearance above the controls.
2. Tankless water heaters are exempt from these strapping requirements as long as the equipment is mounted in accordance with the manufacturer's instructions.
3. Water heaters less than 24" in height do not require strapping.

## **8. Background information on amendment.**

**NOTE:** State-wide and emergency state-wide amendments to the state building code should be based on one of the following criteria:

- (1) The amendment is needed to address a critical life/safety need.
- (2) The amendment is needed to address a specific state policy or statute.
- (3) The amendment is needed for consistency with state or federal regulations.
- (4) The amendment is needed to address a unique character of the state.
- (5) The amendment corrects errors and omissions.**

I am proposing these changes to section 508.2 to reduce inconsistency of how the code is applied and to add clarity for its intent.

Exception #1 is necessary as placement of the strap 4" above the control on every short gas water heater pushes the strap above the 1/3 mark. It is not possible to satisfy the code and the inspectors are not in agreement as to which one takes priority. This amendment would solve this problem.

Exception #2. Tankless water heaters have brackets on the top and bottom that securely mount the equipment to the wall. The purpose of the strapping is to secure a tank style water heater, which has no manufactured means of bracing to the structure. I do not believe it is the intent of this code to include tankless water heaters, yet many inspectors do require the strapping because the code does not make a distinction.

Exception #3. I also propose that water heaters under 24" be exempt from 508.2. Installing two heavy duty straps on a two gallon water heater that is wider than it is tall does not make much sense. I suggested using a 24" rule as this would cover water heaters 15 gallons and under.

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### Economic Impact Worksheet

(Required for statewide amendment requests. Attach supporting documentation.)

Code References: UPC Title: Other water heater installation requirements  
Proponent: Jeff Jordan Phone: 425-636-7058 Date: 5-21-09

#### Part I ♦ Amendment Benefit:

PROBLEM(S) ADDRESSED: Is written for tall gas water heaters and needs clarification for short tanks, tankless and point of use tanks.

PRIMARY REASON FOR AMENDMENT: (check one only)

- ☐ Protect public health, safety and welfare ☐ Mandate from legislation or courts  
☐ Reduce cost ☐ Code change  
☐ "Manage risk" for government ☒ Other Clarify intent & interpretation

TYPE OF BENEFITS PROJECTED: (check all that apply)

- ☐ Saves lives/reduces injuries ☐ Saves energy  
☐ Protects/improves long-term health ☐ Protects environment  
Reduces construction cost:  
☒ Over existing code requirement ☐ Increases accessibility  
☐ Canceling new code requirement ☒ Reduces government enforcement cost  
☐ Off-setting new code requirement ☒ Clarifies/improves existing code  
☒ Increases construction alternatives ☐ Protects property loss/damage  
☐ Other \_\_\_\_\_

#### Part II ♦ Amendment Impacts:

TYPES OF CONSTRUCTION: ☒ New Construction ☒ Remodeling/Tenant Improvement/Repair

COMPLETE TABLE FOR EACH BUILDING TYPE CHECKED

(See reverse for instruction on items <sup>a</sup> through <sup>e</sup>)

√	Building Type	Construction <sup>a</sup> 1st Cost		Enforcement <sup>b</sup>		Owner <sup>c</sup> Ongoing		Other		Supporting data attached
	Residential	C/S <sup>d</sup>	Degree <sup>e</sup>	C/S <sup>d</sup>	Degree <sup>e</sup>	C/S <sup>d</sup>	Degree <sup>e</sup>	C/S <sup>d</sup>	Degree <sup>e</sup>	✓
X	Single family	-70	1	-100	1	0	0			
X	Multi-family	-70	1	-100	1	0	0			
X	Commercial/Retail	-70	1	-100	1	0	0			
X	Industrial	-70	1	-100	1	0	0			
X	Government/Utilities	-70	1	-100	1	0	0			
	Other:									

OTHER EFFECTS:

Evaluate by number scale 0-3 (0=none, 3=significant)

- 0 Likelihood for litigation  
0 Decrease public cooperation  
0 Disadvantage small business  
Other \_\_\_\_\_

Evaluate by letter code

(Spec, Custom, Factory, Remodel, Manufact., Other, NA)

- 0 Advantage one industry  
NA Disadvantage one industry

#### Part III ♦ Comments and Recommendations:

Evaluate each by number scale 0-3 (0=none, 3=significant)

- 3 Difficulty to Enforce 1 Cost of not adopting amendment  
0 Costs exceed Benefits 0 Degree of TAG controversy  
1 C/S Confidence level

Evaluate Yes or No (circle one)

- Y N Were alternative solutions considered  
Y N Recommend further benefit/impact analysis  
Y N Recommend future benefit/impact review